



## ***ELECTRICAL REPAIRMAN UNDERGROUND (COAL)***

### **PHOTO ID REQUIRED**

Article 3 of the Coal Mine Safety Laws of Virginia establishes requirements for certification of coal mine workers. The certification requirements are included in §45.1-161.24 through §45.1-161.41 in which the Board of Coal Mining Examiners is established for the purpose of administering the certification program. The Board has promulgated certification regulations 4 VAC 25-20, which set the minimum standards and procedures required for Virginia coal miner examinations and certifications.

#### **CERTIFICATION CLASSIFICATION: *\*Underground Electrical Repairman (Coal)***

This certification authorizes the holder to:

- Perform electrical work and inspections at all underground and surface areas of underground coal mines
- Make examinations on electrical equipment
- Conduct and record results of electrical examinations

**NOTE:** This certification shall be used at surface and underground mines.

#### **APPLICATION/EXPERIENCE REQUIREMENTS:**

- Application (BCME-1) and \$40.00 fee 5 working days prior to examination
  - **Note:** Classes are limited to 20 people and tend to fill quickly. Application fees are due no later than 5 working days prior to the examination, but this will not guarantee that an opening will be available.
- One year of electrical experience in underground coal mining under the direction of a certified underground electrical repairman or appropriately related work experience approved by the Chief of the Division of Mines. **NOTE: Experience must be submitted within 5 years of passing the examination. After 5 years records are destroyed. Must reapply if future certification is desired.**
- Current first aid training (MSHA 5000-23 Annual Retraining or New Miner Inexperienced Training acceptable).
- Six months credit will be granted for electrical educational training from a college, technical school or vocational school (certificate required). The remaining 6 months must be underground electrical work under the supervision of a certified electrician.
- Hold a General Miner Certification.

**NOTE:** Must provide MSHA Individual Identification Number prior to certification being issued.

**EXAMINATION REQUIREMENTS:** A score of 80% on each element of the examination.

<b>ELEMENTS OF EXAM</b>	<b>NUMBER OF QUESTIONS</b>
▪ Alternating Current (AC)	20
▪ Direct Current (DC)	20
▪ Circuits & Equipment/drawings (CE)	25
▪ Cable Splicing (CS)	20
▪ High Voltage (HV)	20
▪ Legal Requirements (LR)	20
▪ Permissibility (PR)	20
▪ Gas Detection - practical demonstration	
▪ Records - Practical Stations (7)	
1. Control Circuit Troubleshooting - Electrical Schematic Reading (ER)	
2. Electrical Examinations - Record Keeping Underground (RU)	
3. Electrical Examinations – Record Keeping Surface (RS)	
4. Cable Troubleshooting (CT)	
5. Circuit Breaker Troubleshooting (CB)	
5A. Pump Station (PP)	
6. Permissibility (PD)	
7. High Voltage Power Move (VP)	

**RECOMMENDED REFERENCE/STUDY MATERIALS:**

- Electrical Study Guide (\$20.00)
- Coal Mine Safety Laws of Virginia (\$25.00)
- BCME Requirements (No Charge)
- Title 30 CFR Parts 18, 75, 77 (Included in study guide)
- First Aid for Miners Study Guide (\$15.00)

**The above mentioned study materials are available at the Department of Mines, Minerals and Energy's Big Stone Gap Office, Customer Assistance Center (276) 523-8235 and Lebanon Field Office (276) 415-9650.**

**\*8 hours Electrical Repairman continuing education will update this certification.**